Attorney Docket No.: 29250-001086/US Lucent Case Name: 126190/GOLESTANI 5-53-3

## THE ALLOCATION OF CHANNELS TO WIRELESS LANS

## ABSTRACT OF THE DISCLOSURE

Channels are allocated to one or more cells within a wireless LAN (WLAN) without causing unacceptable interference. The allocation involves dividing an allocation time period into frames, each frame having a substantially short duration, and then allocating one or more channels to one or more WLAN cells during each such frame according to an allocation vector. The vector assures that each cell allocated a channel is sufficiently distant from every other cell allocated the same channel to minimize cross interference. Only those cells allocated a channel are allowed to transmit during a given frame. The allocation vectors are determined in such a way that the performance of a WLAN is optimized.

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